## **CLAIMS**

1. A cosmetic formulation comprising at least one pigment of formula (I)

## 5 wherein

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R<sub>1</sub> signifies  $R_3 \qquad R_4 \qquad R_4 \qquad R_4 \qquad R_3 \qquad R_4 \qquad R_5 \qquad R_4 \qquad R_5 \qquad R_4 \qquad R_5 \qquad R_5 \qquad R_6 \qquad R_7 \qquad R_8 \qquad R_8 \qquad R_8 \qquad R_8 \qquad R_9 \qquad R$ 

wherein

R<sub>3</sub> and R<sub>4</sub> independently from each other signify hydrogen; cyano; halogen; CF<sub>3</sub>; NH<sub>2</sub>; NR<sub>5</sub>R<sub>6</sub>; NR<sub>5</sub>COR<sub>5</sub>; COOR<sub>5</sub>; CONR<sub>5</sub>R<sub>6</sub>; OCOR<sub>5</sub>; SR<sub>5</sub>; SOR<sub>5</sub>; SO<sub>2</sub>R<sub>5</sub>; SO<sub>2</sub>NR<sub>5</sub>R<sub>6</sub>; SO<sub>2</sub>OR<sub>5</sub>; CHO; Si(R<sub>5</sub>)<sub>3</sub>; SO<sub>3</sub>M; linear or branched C<sub>1</sub>-C<sub>30</sub>alkyl, which can be unsubstituted or substituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; linear or branched C<sub>0</sub>-C<sub>30</sub>alkyleneC<sub>3</sub>-C<sub>12</sub>cycloalkyl, which can be unsubstituted or substituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; linear or branched C<sub>3</sub>-C<sub>30</sub>alkenylene-C<sub>3</sub>-C<sub>12</sub>cycloalkyl, which can be unsubstituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; linear or branched C<sub>3</sub>-C<sub>30</sub>alkenyl, which can be unsubstituted or substituted or substituted

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by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; linear or branched C<sub>0</sub>-C<sub>30</sub>alkyleneC<sub>3</sub>-C<sub>12</sub>cycloalkenyl, which can be unsubstituted or substituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; linear or branched C<sub>3</sub>-C<sub>30</sub>alkenylene-C<sub>3</sub>-C<sub>12</sub>cycloalkenyl, which can be unsubstituted or substituted by one or more halogen, OH, OR5, SR5, NH2, NR5R6, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; phenyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, halogen, cyano or formyl; linear or branched C<sub>7</sub>-C<sub>24</sub>aralkyl, which can be unsubstituted or substituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M; or linear or branched C<sub>8</sub>-C<sub>24</sub>aralkenyl, which can be unsubstituted or substituted by one or more halogen, OH, OR₅, SR₅, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub>, OCOR<sub>5</sub> or SO<sub>3</sub>M, wherein

signifies hydrogen; linear or branched C<sub>1</sub>-C<sub>30</sub>alkyl; C<sub>3</sub>-C<sub>30</sub>-alkenyl; C<sub>3</sub>-

 $R_5$ 

 $R_6$ 

C<sub>12</sub>cycloalkyl; C<sub>6</sub>-C<sub>14</sub>aryl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen; C<sub>7</sub>-C<sub>24</sub>aralkyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen or C<sub>8</sub>-C<sub>24</sub>aralkenyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen, signifies linear or branched C<sub>1</sub>-C<sub>30</sub>alkyl; C<sub>3</sub>-C<sub>30</sub>-alkenyl; C<sub>3</sub>-C<sub>12</sub>cycloalkyl; C<sub>6</sub>-C<sub>14</sub>aryl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen; C<sub>7</sub>-C<sub>24</sub>aralkyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen or C<sub>8</sub>-C<sub>24</sub>aralkenyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>1</sub>-C<sub>6</sub>thioalkyl or halogen and

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 $R_2$ 

signifies hydrogen; a metal; or an unsubstituted or substituted ammonium group, signifies

wherein  $R_3$  and  $R_4$  have the same meanings as defined above, wherein the pigments have a specific surface area (BET) of 6 – 200 m<sup>2</sup>/g.

- 2. A cosmetic formulation according to Claim 1, wherein the pigments have a specific surface area (BET) of  $8 170 \text{ m}^2/\text{g}$ .
- A cosmetic formulation according to Claim 1, wherein the pigments have a specific surface area (BET) of 10 – 150 m²/g.
  - 4. A cosmetic formulation according to any one of Claims 1 3, wherein

$$R_1$$
 signifies  $R_4$ ;  $R_3$ ;  $R_4$ ;

 $R_3$  and  $R_4$  have the meaning as defined in Claim 1.

- 5. A cosmetic formulation according to Claim 4 wherein
- 20 R<sub>3</sub> and R<sub>4</sub> independently from each other signify hydrogen; cyano; halogen; CF<sub>3</sub>; SR<sub>5</sub>; SO<sub>2</sub>R<sub>5</sub>; SO<sub>2</sub>NR<sub>5</sub>R<sub>6</sub>; NR<sub>5</sub>R<sub>6</sub>; COOR<sub>5</sub>; CONR<sub>5</sub>R<sub>6</sub>; OCOR<sub>5</sub>; linear or branched C<sub>1</sub>-C<sub>18</sub>alkyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>,

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 $NR_5R_6$  or  $COOR_5$ ; linear or branched  $C_0$ - $C_{24}$ alkylene $C_3$ - $C_8$ cycloalkyl, which can be unsubstituted or substituted by one or more  $OR_5$ ,  $SR_5$ ,  $NR_5R_6$  or  $COOR_5$ ; linear or branched  $C_3$ - $C_{24}$ alkenylene $C_3$ - $C_8$ cycloalkyl, which can be unsubstituted or substituted by one or more  $OR_5$ ,  $SR_5$ ,  $NR_5R_6$  or  $COOR_5$ ; linear or branched  $C_3$ - $C_{24}$ alkenyl, which can be unsubstituted or substituted by one or more  $OR_5$ ,  $SR_5$ ,  $NR_5R_6$  or  $COOR_5$ ; linear or branched  $C_0$ - $C_2$ 4alkylene $C_3$ - $C_8$ cycloalkenyl, which can be unsubstituted or substituted by one or more  $OR_5$ ,  $SR_5$ ,  $NR_5R_6$  or  $COOR_5$ ; linear or branched  $C_3$ - $C_2$ 4alkenylene- $C_3$ - $C_8$ cycloalkenyl, which can be unsubstituted or substituted by one or more  $OR_5$ ,  $SR_5$ ,  $NR_5R_6$  or  $COOR_5$ ; phenyl, which can be unsubstituted or substituted by one or more methyl, methoxy or cyano; or linear or branched  $C_1$ - $C_1$ 8alkoxy, which can be unsubstituted or substituted or substituted by one or more halogen, OH,  $OR_5$ ,  $SR_5$ ,  $NH_2$ ,  $NR_5R_6$ ,  $COOR_5$ ,  $CONR_5R_6$ , or  $OCOR_5$ , wherein

wherei

signifies hydrogen; linear or branched  $C_1$ - $C_{18}$ alkyl;  $C_3$ - $C_{18}$ alkenyl;  $C_3$ - $C_8$ cycloalkyl;  $C_6$ - $C_{10}$ aryl, which can be unsubstituted or substituted by one or more  $C_1$ - $C_6$ alkyl,  $C_5$ - $C_6$ cycloalkyl or  $C_1$ - $C_6$ alkoxy;  $C_7$ - $C_8$ aralkyl, which can be unsubstituted or substituted by one or more  $C_1$ - $C_6$ alkyl,  $C_5$ - $C_6$ cycloalkyl or  $C_1$ - $C_6$ alkoxy; or  $C_8$ - $C_{12}$ aralkenyl, which can be unsubstituted or substituted by one or more  $C_1$ - $C_6$ alkyl,  $C_5$ - $C_6$ cycloalkyl or  $C_1$ - $C_6$ alkoxy,

signifies linear or branched C<sub>1</sub>-C<sub>18</sub>alkyl; C<sub>3</sub>-C<sub>18</sub>alkenyl; C<sub>3</sub>-C<sub>8</sub>cycloalkyl; C<sub>6</sub>-C<sub>10</sub>aryl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; C<sub>7</sub>-C<sub>8</sub>aralkyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; or C<sub>8</sub>-C<sub>12</sub>aralkenyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy.

6. A cosmetic formulation according to any of the preceeding claims, wherein

$$R_{2}$$
 signifies  $R_{4}$ ;  $R_{3}$   $R_{4}$ ;  $R_{3}$   $R_{4}$ ;  $R_{4}$ ;  $R_{3}$   $R_{4}$ ;  $R_{4}$ ;  $R_{4}$ ;  $R_{4}$ ;  $R_{5}$   $R_{4}$ ;  $R_{5}$   $R_{5}$   $R_{5}$ ;  $R_{5}$ ;  $R_{5}$   $R_{5}$ ;  $R_{5}$ 

R<sub>3</sub> and R<sub>4</sub> have the meaning as defined above as in Claim 1.

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7. A cosmetic formulation according to Claim 6 wherein

SOR<sub>5</sub>; SO<sub>2</sub>R<sub>5</sub>; SO<sub>2</sub>NR<sub>5</sub>R<sub>6</sub>; NR<sub>5</sub>R<sub>6</sub>; COOR<sub>5</sub>; CONR<sub>5</sub>R<sub>6</sub>; OCOR<sub>5</sub>; linear or branched C<sub>1</sub>-C<sub>18</sub>alkyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; linear or branched C<sub>0</sub>-C<sub>24</sub>alkyleneC<sub>3</sub>-C<sub>8</sub>cycloalkyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; linear or branched C<sub>3</sub>-C<sub>24</sub>alkenyleneC<sub>3</sub>-C<sub>8</sub>cycloalkyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; linear or branched C<sub>3</sub>-C<sub>24</sub>alkenyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; linear or branched C<sub>0</sub>-C<sub>24</sub>alkyleneC<sub>3</sub>-C<sub>8</sub>cycloalkenyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; linear or branched C<sub>3</sub>-C<sub>24</sub>alkenylene-C<sub>3</sub>-C<sub>8</sub>cycloalkenyl, which can be unsubstituted or substituted by one or more OR<sub>5</sub>, SR<sub>5</sub>, NR<sub>5</sub>R<sub>6</sub> or COOR<sub>5</sub>; phenyl, which can be unsubstituted or substituted by one or more methyl, methoxy or cyano; or linear or branched C<sub>1</sub>-C<sub>18</sub>alkoxy, which can be unsubstituted or substituted by one or more halogen, OH, OR<sub>5</sub>, SR<sub>5</sub>, NH<sub>2</sub>, NR<sub>5</sub>R<sub>6</sub>, COOR<sub>5</sub>, CONR<sub>5</sub>R<sub>6</sub> or OCOR<sub>5</sub>,

R<sub>3</sub> and R<sub>4</sub> independently from each other signify hydrogen; cyano; halogen; CF<sub>3</sub>; SR<sub>5</sub>;

wherein

R<sub>5</sub> signifies hydrogen; linear or branched C<sub>1</sub>-C<sub>18</sub>alkyl; C<sub>3</sub>-C<sub>18</sub>alkenyl; C<sub>3</sub>-C<sub>8</sub>cycloalkyl; C<sub>6</sub>-C<sub>10</sub>aryl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; C<sub>7</sub>-C<sub>8</sub>aralkyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; or C<sub>8</sub>-

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- $C_{12}$  aralkenyl, which can be unsubstituted or substituted by one or more  $C_{1}$ - $C_{6}$  alkyl,  $C_{5}$ - $C_{6}$  cycloalkyl or  $C_{1}$ - $C_{6}$  alkoxy,
- R<sub>6</sub> signifies linear or branched C<sub>1</sub>-C<sub>18</sub>alkyl; C<sub>3</sub>-C<sub>18</sub>alkenyl; C<sub>3</sub>-C<sub>8</sub>cycloalkyl; C<sub>6</sub>-C<sub>10</sub>aryl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; C<sub>7</sub>-C<sub>8</sub>aralkyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy; or C<sub>8</sub>-C<sub>12</sub>aralkenyl, which can be unsubstituted or substituted by one or more C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>5</sub>-C<sub>6</sub>cycloalkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy.
- 10 **8.** A cosmetic formulation according to any one of Claims 1 3 comprising at least one pigment of formula (I)

wherein

R<sub>1</sub> signifies 
$$R_4$$
;  $R_4$ ;  $R_5$ ;

R<sub>3</sub> and R<sub>4</sub> independently from each other signify hydrogen; cyano; halogen; SO<sub>2</sub>N(C<sub>6</sub>-C<sub>4</sub>alkyl)<sub>2</sub>; linear or branched C<sub>1</sub>-C<sub>6</sub>alkyl; linear or branched C<sub>1</sub>-C<sub>6</sub>alkoxy; N(C<sub>1</sub>-C<sub>4</sub>alkyl)<sub>2</sub>; COOC<sub>1</sub>-C<sub>4</sub>alkyl; or phenyl, and

$$R_2$$
 signifies  $R_4$ ;  $R_3$   $R_4$ ;  $R_4$ ;

wherein

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- R<sub>3</sub> and R<sub>4</sub> independently from each other signify hydrogen; cyano; halogen; SO<sub>2</sub>N(C<sub>6</sub>-C<sub>4</sub>alkyl)<sub>2</sub>; linear or branched C<sub>1</sub>-C<sub>6</sub>alkyl; linear or branched C<sub>1</sub>-C<sub>6</sub>alkoxy; N(C<sub>1</sub>-C<sub>4</sub>alkyl)<sub>2</sub>; COOC<sub>1</sub>-C<sub>4</sub>alkyl; or phenyl.
- 9. A cosmetic formulation according to any of Claims 1 8 comprising
  - a) from 0.0001 to 50 % by weight, preferably from 0.0001 to 25 % by weight, based on the total weight of the preparation, of at least one pigment of formula (I), and
    - b) from 50 to 99.9999 % by weight, preferably from 75 to 99.9999 % by weight, based on the total weight of the preparation, of a cosmetically suitable carrier.
- 15 **10.** A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of a stick comprising up to 99.9999 % by weight of fatty components.
  - 11. A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of an anhydrous or aqueous ointment or cream.
  - 12. A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of a water-in-oil emulsion or in the form of an oil-in-water emulsion comprising from 1 to 98.8 % by weight of the fatty phase, from 1 to 98.8 % by weight of the aqueous phase and from 0.2 to 30 % by weight of an emulsifier, in each case based on the total weight.

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13. A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of a powder and comprises an inorganic or organic filler, such as talc, zinc stearate, mica, kaolin, nylon powders, polyethylene powders, Teflon, starch, boron nitride, microspheres of copolymers, such as Expancel, Polytrap, silicone resin microbeads, polyethylene powder or polyamide powder, as well as adjuvants, such as binders or colourants.

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- 14. A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of a nail varnish and comprises from 0.1 to 5 % by weight of the pigment in a varnish base.
- 15. A cosmetic preparation or formulation according to any one of claims 1 to 9, which is in the form of a shampoo, a cream or a gel for colouring the hair that is composed of the basic substances conventionally employed in the cosmetics industry.
- **16.** A cosmetic preparation or formulation according to any one of claims 1 to 15, which additionally comprises conventional cosmetic constituents, such as perfumes, antioxidants, preservatives and UV filters.